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EXAMINER
RUTTEN, JAMES D

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/784,492	MARVIN ET AL.
	Examiner	Art Unit	
	JAMES RUTTEN	2192	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 June 2009</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-13,15-27,29,30 and 47</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-13, 15-27, 29-30, and 47</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   **Office Action Summary**   Part of Paper No./Mail Date 20091101

DETAILED ACTION

1.   This action is in response to Applicant's submission filed 6/29/09, responding to the

3/31/09 Office action which detailed the rejection of claims 1-13, 15-27, 29-30, and 47. Claims

1, 19, and 47 have been amended. Claims 1-13, 15-27, 29-30, and 47 remain pending in the

application and have been fully considered by the examiner.

Response to Arguments

2.   Applicant's arguments, see bottom of page 11, filed 6/29/09, with respect to the

rejection(s) of claim(s) 1, 19, and 47 under 35 U.S.C. § 103(a) have been fully considered and

are persuasive. Therefore, the rejection has been withdrawn. However, upon further

consideration, new grounds of rejection are made in view of "The J2EE Tutorial" by Sun

Microsystems ("J2EE Tutorial") and US 6199102 B1 (COBB), respectively.

3.   Applicant's arguments filed 6/29/09 have been fully considered but they are not

persuasive.

       In response to applicant's arguments against the references individually (e.g., see bottom

of page 10 - top of page 11 filed 6/29/09), one cannot show nonobviousness by attacking

references individually where the rejections are based on combinations of references. See *In re*

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986).

       In response to applicant's argument that the examiner's conclusion of obviousness is

based upon improper hindsight reasoning (e.g. see top of page 11 filed 6/29/09), it must be

recognized that any judgment on obviousness is in a sense necessarily a reconstruction based

upon hindsight reasoning. But so long as it takes into account only knowledge which was within

the level of ordinary skill at the time the claimed invention was made, and does not include

knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In*

re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, US 20030005181 A1

(*BAU, III et al.*) is related to the field of Web services (see *BAU, III et al.,* page 1, paragraph

[0001]), and US 2002/0174241 A1 (*BEGED-DOV et al.*) is related to integration between web

services (see *BEGED-DOV et al.* page 1, paragraph [0001]). Thus, the inventions are related to

similar subject matter, and one of ordinary skill would certainly utilize both references.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1-13, 15-27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over US 2003/0005181 A1 (BAU, III, et al.) in view of US 2002/0174241 A1 (BEGED-DOV et

al.), in view of "The J2EE Tutorial" by Sun Microsystems ("J2EE Tutorial").

As per claim 1, *BAU, III, et al.* discloses a computer readable medium having instructions

stored thereon (see, for example, paragraph [0096] on p. 8) that, when executed by a processor,

causes the processor to provide a network-accessible service, the instructions comprising:

an annotated source code, which is a programming language augmented with declarative

meta-data that exposes program logic as a network-accessible service (see, for example,

paragraph [0026] on p. 2);

at least one deployed service component that provides the network-accessible service to a

client (see, for example, paragraph [0026] on p. 2); and

an enhanced compiler that analyzes the annotated source code, recognizing numerous

types of meta-data annotations, and generating a mechanism, which includes one or more of:

object files, software components and deployment descriptors, to facilitate the deployment of the

at least one service component (see, for example, paragraph [0026] on p. 2).

BAU, III, et al. fails to expressly disclose implementing such a security type. However,

BEGED-DOV et al. teaches such security types (for example, user identity…) in the context of

web services (see, for example, paragraph [0019] on p. 3). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to incorporate such

a security type as per the teachings of *BEGED-DOV et al.* One would be motivated to do so to

mitigate risk by providing a known security mechanism (see, for example, *BEGED-DOV et al.*,

paragraph [0019] on p. 3).

BAU, III, et al. fails to expressly disclose: wherein the annotated source code comprises

one or more roles, and the automatically created security type comprises role based security that

is limited to the one or more roles. However, *J2EE Tutorial* teaches limiting security types using

security roles for providing security in an application. See page 1, e.g. "security roles." It would

have been obvious to one of ordinary skill in the art at the time the invention was made to use the

security roles of *J2EE Tutorial* with the annotated source code of *BAU, III, et al.* in order to

provide access rights to certain applications (see *J2EE Tutorial*, page 1). Furthermore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made to use the

automatically generated Enterprise JavaBeans of *BAU, III, et al.* (see paragraph [0040]) with the

teachings of *J2EE Tutorial* since Enterprise JavaBeans are an inherent part of J2EE.

As per claim 2, *BAU, III, et al.* further discloses the network-accessible service is a Web

service (see, for example, paragraph [0026] on p. 2).

As per claim 3, *BAU, III, et al.* further discloses the system is capable of simultaneously

managing multiple transactions, wherein each transaction can be a conversation of a request

and/or a response from the client for the network-accessible service (see, for example,

paragraphs [0045] through [0056] on pp. 4-5).

As per claim 4, *BAU, III, et al.* further discloses the system is capable of managing

multiple asynchronous transactions, wherein within each asynchronous transaction, the response

may be temporally separated from the initiating request for the network-accessible service from

the client (see, for example, paragraphs [0045] through [0056] on pp. 4-5).

As per claim 5, *BAU, III, et al.* further discloses an integrated development environment

(IDE) capable of facilitating a graphical interface-based design and deployment of the network-

accessible service (see, for example, paragraph [0026] on p. 2).

As per claim 6, *BAU, III, et al.* further discloses the annotated source code is Java-based

(see, for example, paragraph [0079] on p. 6).

As per claim 7, *BAU, III, et al.* further discloses the meta-data can be either in-file with the annotated source code, or in a separate file, which can be a specially formatted XML file (see, for example, paragraph [0043] on p. 4).

As per claim 8, *BAU, III, et al.* further discloses the annotated source code is capable of facilitating access to an external service, which can be one of stateful, stateless, synchronous, and asynchronous (see, for example, paragraphs [0068] and [0069] on p. 5).

As per claim 9, *BAU, III, et al.* further discloses the annotated source code is capable of defining a wire binding between the network-accessible service and a physical wire format and/or protocol (see, for example, paragraphs [0058] and [0059] on p. 5).

As per claim 10, *BAU, III, et al.* further discloses the wire binding can be at least one of: SOAP over HTTP or SMTP; transport of XML via generic HTTP Post; transport of XML over other protocols such as FTP and mail; and transport of XML over messaging services such as JMS or MSMQ (see, for example, paragraphs [0058] and [0059] on p. 5).

As per claim 11, *BAU, III, et al.* further discloses the at least one service component comprises a servlet container and an Enterprise Java Bean (EJB) container, which are coupled together to deploy a Web service (see, for example, paragraphs [0085] and [0086] on p. 7).

As per claim 12, *BAU, III, et al.* further discloses the servlet container is capable of at least one of: listening and responding to a service request from the client; and identifying and queuing the service request to be buffered (see, for example, paragraphs [0085] and [0086] on p. 7).

As per claim 13, *BAU, III, et al.* further discloses the EJB container is capable of

dispatching a service request based on meta-data to a stateless or stateful component (see, for

example, paragraphs [0085] and [0086] on p. 7).

Regarding claim 15, see the disclosure and teachings applied above to claim 1.

As per claim 16, *BAU, III, et al.* further discloses the enhanced compiler is capable of

creating reliable messaging software for the network-accessible service using a specification

provided by the annotated source code, wherein the reliable message software is capable of

guaranteeing message delivery for communication between the service and the client (see, for

example, paragraphs [0007] and [0008] on p. 1).

Regarding claims 17 and 18, in addition to the disclosure applied above, *BAU, III, et al.*

fails to expressly disclose implementing such an interceptor. However, *BEGED-DOV et al.*

teaches such an interceptor (for example, interception and transformation…) in the context of

web services (see, for example, paragraphs [0018] through [0020] on pp. 2-3). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to

incorporate such an interceptor as per the teachings of *BEGED-DOV et al.* One would be

motivated to do so to efficiently implement a secure transfer of resources (see, for example,

paragraphs [0018] through [0020] on pp. 2-3).

Regarding claims 19-27, 29, and 30, these are method versions of the claimed machine

readable media discussed above (claims 1-5, 8, 9, 12-14, 16, and 17), wherein all limitations

have been addressed as set forth above.

6.   Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over US

2003/0005181 A1 (BAU, III, et al.) in view of US 2002/0174241 A1 (BEGED-DOV et al.), in

view of US 6199102 B1 (COBB).

        As per claim 47, *BAU, III, et al.* discloses a machine readable medium having

instructions stored thereon (see, for example, paragraph [0096] on p. 8) that when executed,

cause the system to:

        expose program logic as a network-accessible service using an annotated source code,

which is a programming language augmented with declarative meta-data capable of (see, for

example, paragraph [0026] on p. 2);

        provide the network-accessible service to a client (see, for example, paragraph [0026] on

p. 2); and

        analyze the annotated source code, recognizing numerous types of meta-data annotations,

and generating a mechanism, which can include one or more of: object files, software

components and deployment descriptors, to facilitate the deployment of the at least one service

component (see, for example, paragraph [0026] on p. 2).

        BAU, III, et al. fails to expressly disclose implementing such an interceptor. However,

BEGED-DOV et al. teaches such an interceptor (for example, interception and transformation...)

in the context of web services (see, for example, paragraphs [0018] through [0020] on pp. 2-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to incorporate such an interceptor as per the teachings of *BEGED-DOV et al.* One

would be motivated to do so to efficiently implement a secure transfer of resources (see, for

example, paragraphs [0018] through [0020] on pp. 2-3).

   BAU, III, et al. also fails to disclose: …wherein the interceptor is configured to transform

message headers and content between the client and the deployed service component. However,

the interception and transformation of *BEGED-DOV et al.* works with http messages and content

which are then transformed by the "Trusted Internet Clipboard Service." E.g., see at least

"transformations" at the end of paragraph [0019]. Furthermore, *COBB* teaches transformation of

message headers (see column 15 lines 4-6, e.g. "modification of the Message Header.") It would

have been obvious to one of ordinary skill in the art at the time the invention was made to use the

transformation of *BEGED-DOV et al.* with the message headers of *COBB* in order to allow

processing on only the message header without retrieving the message body as suggested by

COBB (see column 15 lines 20-26).

                              Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JAMES RUTTEN whose telephone number is (571)272-3703.

The examiner can normally be reached on M-F 9:00-5:30.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Primary Examiner, Art Unit 2192